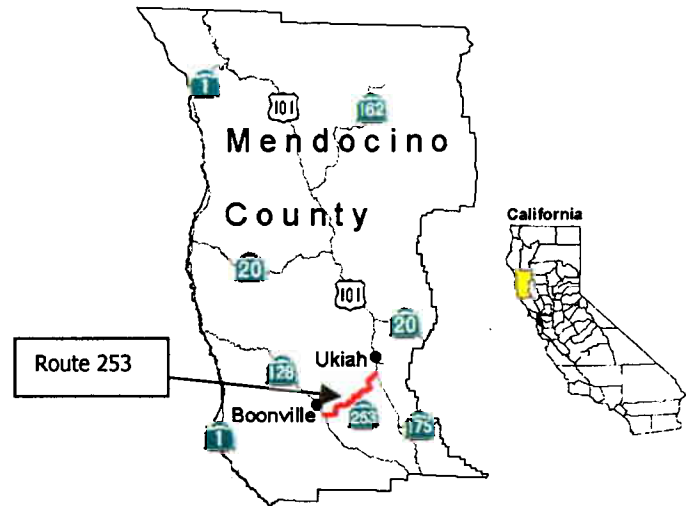




ROUTE CONCEPT REPORT

ROUTE 253 CORRIDOR



01-MEN-253-KP 0.0/27.7 (PM 0.0/17.2)

All information in this Route Concept Report is subject to change as conditions change and new information is obtained.

I approve this Route Concept Report as an analysis and conceptual long-range guide for Caltrans, our Regional Transportation Planning Partners, local entities and the public.

Approval Recommended:

Approval Recommended:


CHARLIE FIELDER 1/11/02
Deputy District Director
Program/Project Management


CHERYL S. WILLIS 1/14/02
Deputy District Director
Planning

Approved:


RICK KNAPP 1/14/02
District Director
District 1

JANUARY 2002

ROUTE 253 RCR

ROUTE CONCEPT REPORT

Statement of Planning Intent

The Route Concept Report (RCR) is a planning document which describes the Department's conceptual improvement options for a given transportation route or corridor. Considering reasonable financial constraints and projected travel demand over a 20-year planning period, the RCR considers transportation facility needs for each route or corridor. The RCR is a tool for implementing interregional and statewide continuity of the State's transportation network, and will be updated as needed as conditions change, or new information is obtained.

Purpose of the Route Concept Report

The objective of the RCR is to have local, regional, and state consensus on route or corridor concepts, improvement goals, and strategies. This document provides concept information only and does not determine policy nor establish a course of action. Route Concept Reports are prepared by District staff in cooperation with local and regional agencies.

Assumptions

The following assumptions form the basis for the development of Route Concept Reports:

1. The relative importance of State highways in the District is generally based on functional classification. In general, higher priority is given to major improvements on principal arterial routes as compared to minor arterials and collectors.
2. State highways with improvement concepts must have realistic concept levels of service. Concept levels of service are not established on State highways that will only be maintained (since improvements would not be made to address level of service concerns).
3. Level of service calculations are based on the 1997 Highway Capacity Manual (see Appendix A).
4. Determinations of future level of service for State highways in District 1 are based in part upon Statewide and Regional forecasts of State highway travel developed by the Department.
5. Route concepts apply generally to an entire route or corridor, unless there are overriding considerations (e.g. a major change in function along the route or feasibility concerns).
6. Major projects will be developed to meet design standards acceptable to the Federal Highway Administration in order to receive Federal funding for projects. Otherwise, a "design exception" must be secured during the project development process.
7. Safety projects will be pursued on an on-going basis in order to be responsive to safety concerns as they are identified.
8. No planned or programmed improvements were assumed to be complete in analyzing present and future operating conditions. The Route Concept Report details programmed improvements in the 2000 STIP.
9. Environmental documents are not required for Route Concept Reports. Individual improvement projects identified in Route Concept Reports will follow established environmental processes when development is proposed as required by law.

ROUTE CONCEPT REPORT

ROUTE 253

01-MEN-253-KP 0.0/27.7 (PM 0.0/17.2)

I. ROUTE CONCEPT AND RATIONALE

FACILITY CONCEPT

The concept for Route 253 in Mendocino County is 2-lane conventional highway on existing alignment.

Route 253 originates at its junction with Route 128 near the community of Boonville and traverses in a northeasterly direction through the mountains between Anderson and Yokayo Valleys to its junction with Route 101 near the City of Ukiah.

Route 253 is a Rural Minor Arterial, serving the Anderson Valley agricultural communities with access to the City of Ukiah and Route 101. While Route 253 is regionally significant, it cannot effectively compete for capacity improvement funds with other more important routes in the District, generally Rural Principal Arterials.

LEVEL OF SERVICE CONCEPT

No level of service concept has been selected for Route 253.

Route 253 currently operates at a "C" level of service. With the projected traffic increases over the next 20 years, level of service is expected to deteriorate to LOS "D" by 2020. However, no improvements will be made to address reductions in level of service.

ROUTE CONCEPT FUNCTION

This Route Concept will serve as a guide for long-range planning of Route improvements. It recognizes financial considerations and competing priorities both on this route and other routes in the District. It will protect the state's investment in Route 253, while recognizing financial constraints, which will not allow the programming of extensive improvements for all highways.

II. ROUTE MANAGEMENT STRATEGIES

REHABILITATION STRATEGY

Route 253 should be maintained and rehabilitated as necessary.

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Based on functional classification, traffic volumes and maintenance service levels, Route 253 in District 1 should be maintained and rehabilitated as necessary at its present width and on its existing alignment.

Current rehabilitation standards (3-R) in the Caltrans Highway Design Manual indicate that Route 253 is wide enough to permit rehabilitation at present width over most segments with "rehabilitate as necessary" concepts. Widening segments, which do not meet 3-R width standards, is generally not considered prudent for the following reasons:

1. Costs to widen narrow sections including shoulder widening would be inordinately high because of rugged terrain.
2. Existing vertical and horizontal alignment does not meet current standards.
3. Committing extensive funds for widening in conjunction with correcting pavement deficiencies would divert funds from higher priority improvements on other routes.

SAFETY AND OPERATIONAL IMPROVEMENT STRATEGY

No segment of Route 253 has collision rates greater than 1.5 times (150% of) the expected Statewide average. The District has an established collision surveillance and monitoring program, which identifies locations with collision concerns and recommends safety improvements when warranted. **Safety improvements at spot locations will be considered as necessary.**

Bridge replacement, storm damage and operational improvement projects will also be considered as necessary. These projects, in addition to safety projects, should be constructed to appropriate State and Federal standards.

In the late 1980's, the Department barrier striped two-lane highways to comply with Federally mandated standards. This reduced the number of passing opportunities (and the level of service) on most two-lane State highways, including Route 253. It is anticipated that barrier striping on Route 253 can be mitigated with the construction of "turnouts".

GOODS MOVEMENT STRATEGY

Route 253 is a major all-weather Route through the Coast Range foothills connecting Anderson and Yokayo Valleys to the cities of Boonville and Ukiah. It is used to transport food and other essential supplies and to transport goods (primarily agricultural products) to market.

Consistent with the relatively low truck traffic volumes on this Route, no goods movement improvement projects are planned at this time.

NON-MOTORIZED FACILITIES STRATEGY

Route 253 experiences little non-motorized traffic. There are no cities or communities along Route 253.

Shoulder widths on Route 253 are generally minimal, and improved shoulders would better

ROUTE 253 RCR

accommodate bicyclists and pedestrians. No projects for shoulder improvement along Route 253 are currently programmed because of minimal use.

CORRIDOR PRESERVATION STRATEGY

It is anticipated that Route 253 will remain a 2-lane conventional highway, on existing alignment. No substantial long-term right of way needs are anticipated. Some right of way may be needed for storm damage reconstruction, maintenance/rehabilitation activities or safety/operational improvements.

III. ALTERNATIVE CONCEPTS CONSIDERED

No alternative concepts were considered for Route 253 in District 1.

IV. ROUTE ANALYSIS

DESCRIPTION

Route 253 originates at its intersection with Route 128, at the southeastern end of the Anderson Valley, approximately one mile south of the community of Boonville. The Route terminates at its junction with Route 101 approximately three miles south of Ukiah. The post mile description of the Route is 01-MEN-253-KP 0.0/27.7 (PM 0.0/17.2)

ROUTE PURPOSE

Route 253 is functionally classified as Rural Minor Arterial. This Route can be characterized as generally mountainous, with moderate to steep grades and curvilinear alignment. Its primary function is to connect the agricultural communities of the fertile Anderson Valley with Ukiah, the largest urban center in the region.

Route 253 in conjunction with Route 128 also provides coastal communities with access to Route 101 and Ukiah. Conversely, residents of the greater Ukiah area are provided access to the recreational facilities along Route 128, the coastal communities, and Route 1. Agriculture, logging and tourism generate many of the trips over Route 253.

ROUTE SEGMENTATION

Route 253 is considered to be one segment for System Planning purposes as shown in Table 1 below:

**TABLE 1
ROUTE 253 SEGMENTATION**

SEG #	MEN		DESCRIPTION
	KP	PM	
1	MEN-0.0/27.7	0.0/17.2	Rte 128 at Boonville to junction Rte 101 near Ukiah

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LAND USE

Land use adjacent to Route 253 is generally open space and agricultural (primarily ranching). Little development is anticipated along this route. The route termini near Boonville and Ukiah have the greatest potential for development.

EXISTING FACILITIES

Table 2 below will summarize existing facility characteristics for the Route 253 corridor in District 1.

**TABLE 2
EXISTING FACILITY CHARACTERISTICS
ROUTE 253**

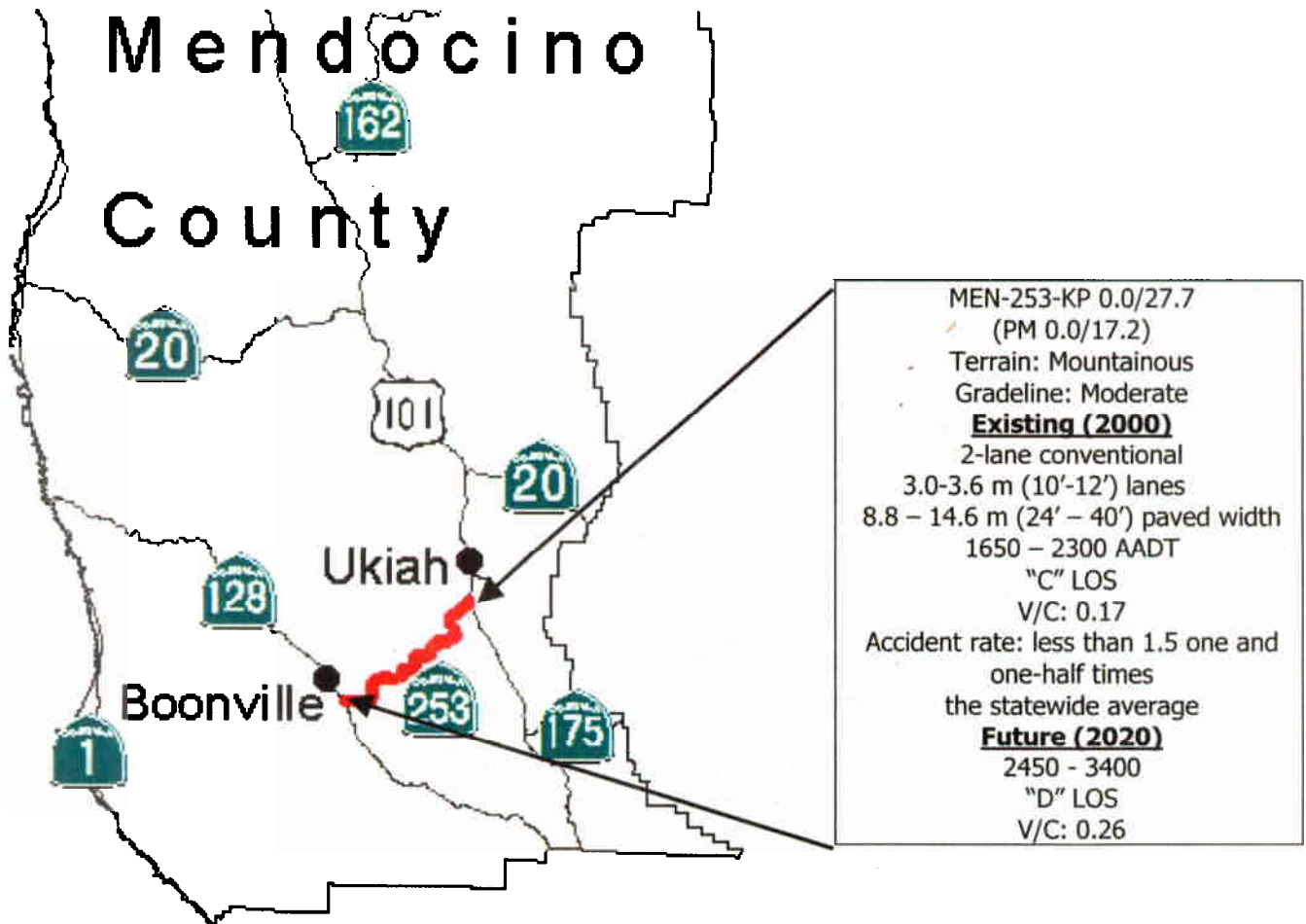
SEG #	MEN			DESCRIPTION	EXISTING FACILITY
	KP	P	PM		
1	0.0/27.7	0.0/17.2		Rte 128 at Boonville to junction Rte 101 near Ukiah	2-lane conventional

Functional Classification	Rural Minor Arterial
Eligible for Federal Funding	Yes
Freeway and Expressway System	No
Eligible for Scenic Highway Designation	No
Subsystem of Highways for Extra Legal Loads (SHELL)	No
Surface Transportation Assistance Act (STAA) Trucks Allowed:	No
Strategic Highway Network	No
National Highway System	No
Interregional Road System	No
Public Airports Served	Boonville Airport at junction of Route 128
Rail Service	None
Intersecting State Highway Routes	101, 128
Park and Ride Lots	None

OPERATING CONDITIONS

Present and future operating conditions, including traffic volume ranges, level of service, and volume to capacity ratios for both existing and anticipated future conditions for Route 253 are shown on Map 1 on the following page. Further information regarding specific operating and geometric conditions may be found in the Department's source documents (e.g., the State Highway Inventory, the State Highway Log, and Traffic Volumes on California State Highways, etc.)

**ROUTE 253 RCR
MAP 1
PRESENT AND FUTURE OPERATING CONDITIONS
ROUTE 253**



PROGRAMMED IMPROVEMENTS

There are no programmed improvements in the 2000 State Transportation Improvement Program (STIP).

There are two bridge replacement/repair projects with an approximate cost of \$2.1 million in the 2000 State Highway Operation and Protection Program (SHOPP).

V. ENVIRONMENTAL CONSIDERATIONS

Environmental considerations along Route 253 include:

- Anderson and Soda Creeks are tributaries of the Navarro River with critical salmon and steelhead spawning and nursery habitats.
- Route 253 has two potential historic sites at KP 6.47 & 8.07 (PM 4.02 & 5.41) where Stagecoaches may have had rest stops.

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- Soil stability is a factor for concern along many areas of Route 253.
- The water quality of Anderson and Soda Creeks is also of concern.
- Rare and sensitive plant and animal species are located adjacent to Route 253 at numerous locations

VI. REGIONAL TRANSPORTATION PLANNING

The 1996/98 Mendocino County Regional Transportation Plan authored by the Mendocino Council of Governments (MCOG) calls for long term maintenance of State Highway Routes. The route issues were noted as follow:

1. Some improvements are necessary to improve alignment, grade and safety, particularly in substandard areas.
2. Passing lanes are needed in some areas to mitigate Federal barrier striping standards.
3. Capacity improvements are recognized as not likely.

VII. AREAS OF CONCERN

The following criteria are used to identify areas of concern on Route 253 based on an analysis of level of service and collision history:

1. A segment is considered to be a "level of service concern" if the concept level of service (LOS) will not be achieved under present or future traffic conditions, or the segment operates at capacity during peak hour.
2. A segment is considered to be a "safety concern" if the total collision rate for a five-year period for that segment exceeds one and one-half times the Statewide average for similar facilities.

Based on these criteria, no areas of concern were identified on Route 281 in District 1.

VIII. IMPROVEMENTS NECESSARY TO ACHIEVE THE ROUTE CONCEPT

No new facility improvements are necessary to achieve the route concept (2-lane conventional highway on existing alignment) through the twenty-year period. Safety improvements should be made, as necessary and operational improvements should be considered on a limited basis.

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IX. TRANSIT AND HIGH OCCUPANCY VEHICLE (HOV) CONSIDERATIONS

Mendocino Transit Authority utilizes Route 253 in providing public transit service between Ukiah, the Mendocino Coast and Fort Bragg. Due to the rural nature of Route 253, and relatively low peak hour traffic volumes during commute hours, no HOV considerations are necessary.

X. ACCESS MANAGEMENT

Access management involves managing where vehicles are allowed to enter the highway, to improve highway operations and reduce accidents.

Overall, access management is generally not a concern on Route 253, and is not likely to be a future concern since development along the route is minimal, except in the Boonville area.

XI. ADOPTIONS, RESCISSIONS AND RELINQUISHMENTS

New or changed highway routings generally require adopting a new route and rescinding the previously adopted route. The Route may also be relinquished to a city, county or other public entity.

No significant adoptions, rescissions, or relinquishments are anticipated on Route 253 in District 1.

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APPENDIX A
Level of Service (LOS)

LOS

A.



**Description of Typical
Traffic Conditions**

Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed, and a high level of comfort and convenience.

Delay

None

**Service
Rating**

Excellent

B



Stable traffic flow – speed becoming slightly restricted. the presence of others in the traffic stream begins to be noticeable. Low resistance on maneuverability.

None

Very Good

C



Stable traffic flow, but less freedom to select speed, change lanes or pass. Comfort and convenience Decreasing as density increases.

Minimal

Good

D



Approaching unstable flow. Speeds tolerable, but subject to sudden and considerable variation. Reduced maneuverability, driver comfort and convenience.

Minimal

Adequate

E



Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort and convenience.

Significant

Fair

F



Forced traffic flow. Speed and flow may drop to zero with high densities. Queues tend to form behind such locations since arrival flows exceed traffic discharges.

Considerable

Poor